

Components of Home Management in Relation to Selected Variables

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CONTENTS

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Introduction.....	3
Methodology.....	4
Observations in Homes.....	4
General Design of Interview Schedule.....	4
Actual Interviews.....	4
Sample.....	4
Coding of Data.....	5
Variables.....	6
Analysis, Interpretation, and Methodological Comments.....	6
Plan.....	6
Standard.....	6
Attributes of Standard.....	9
Sequence.....	11
Attributes of Sequence.....	11
Relationship of Attributes of Standard and Sequence.....	13
Frequency of Use of Plans.....	15
Control.....	15
Relationship of Attributes of Standard and Sequence and Control Components.....	19
Implications from Research.....	20
Components.....	20
Attributes.....	20
Summary.....	22
References.....	23
Appendix A—Definitions of Concepts.....	24
Appendix B—Photographs Used in Interviews.....	34
Appendix C—Hypothetical Situations Used in Interviews.....	37
Appendix D—Directions for Sampling Procedures.....	37
Appendix E—Definitions of Terms.....	38

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INTRODUCTION

The main purpose of this report is the presentation of an empirical study of homemakers' responses to questions designed to elicit information about managerial components. Preliminary to the empirical study, a management framework with accompanying structure and terminology was developed to serve the research purpose.

The study is part of Hatch project 278, Components Related to Effectiveness and Satisfaction with the Managerial Role of Homemakers. Isolation of components of home management and the development of a conceptual framework were presented in a 1966 journal article (11). Identification of the components of managerial situations in the home is the focus of this report.

The conceptual framework developed for the project utilized a systems approach. Through such a framework, recognition can be given both to the organization of concepts and to their dynamic aspects in home management situations. A system was defined by Dechert (5) as an organized collection of interrelated elements characterized by a boundary. The members of the household and their shared resources define the boundary of the household; everything within this context is part of the internal environment of the family or household. The household, defined as persons living as a unit, is an open system in that there is constant interchange with the external environment.

Two major sub-systems, personal and managerial, within the family or household unit were proposed by Deacon (4). Among the functions of the personal system within the household boundary are: (a) the evolution of the fundamental values of the individual family members and of the groups; (b) role identification and personality development; and (c) the socialization of the group's members—particularly the young. Although these functions are accomplished in close association internally with the managerial sub-system, they are reflected predominantly through interpersonal and expressive activities. External to the household, these functions are reflected through the many societal roles assumed and in response to cultural and social values and norms transmitted through personal relationships.

The managerial sub-system is comprised primarily of planning and controlling the use of resources with respect to demands. Values, basic to demands,

are defined as that which is desirable or has worth. Goals are value-based objectives held by individuals and/or a group. Goals and events (pertinent occurrences to which one responds) comprise the demands which, with resources, are the inputs to the managerial sub-system. Resources are defined as means for meeting demands.

Resource use and met demands are the outputs from the managerial sub-system. The output of satisfactions from resource choices and activities feeds back to the personal sub-system in psychological fulfillment of needs. Resource use in relation to demands has implications for additions, depletions, or changes in what is available for subsequent use.¹

The components of the managerial sub-system, planning and controlling, were the major focus of the study reported here. Planning was defined as a series of decisions, i.e., choices or resolution of alternatives concerning standards and/or sequences of action. Standards, a measure of quality and/or quantity, were included as part of the plan. They represent in the management situation the criteria for action as the result of decisions which reconcile resources with demands.² Quality was defined as a property or image of that which is desired and quantity as a determinant of estimated amount. Sequence was defined as ordering parts of a task or ordering among tasks, although this study was limited to ordering among tasks. Coordinated tasks, those performed together by overlapping and dovetailing, were examined.³

Attributes of plans for both standard and sequence were proposed—complexity, reality, clarity,

¹Bardwell (2) studied selected input-output relationships of the personal and managerial sub-systems of families with and without the presence of chronic maternal illness. Physical care and maintenance of family members (a responsibility of the managerial sub-system) and social and affectional care of family members (personal sub-system) were the major demand components. Measures for resources for both sub-systems were operationalized. Output components, met demands and resource use, were identified and measured. Considerable association was found between the input and output measures.

As a part of the project reported here, Ater (1) conducted additional research on certain qualities of family relationship behavior and the managerial component of standards. In a sample of 104 homemakers in Chillicothe, Ohio, there was more association within the family relationships measures and within the measures of standards than between the two, although sufficient interrelationship occurred to merit further study.

²The approach to standards as developed by Walker (19) was helpful to the authors.

³Steidl's work (16) on the relationships between tasks was particularly influential, along with Nichols' conceptualization of organization (12).

and flexibility.⁴ Plans were also considered according to frequency of use—single-use or repeat-use plans.

Controlling, the regulation of planned behavior, was the second major component of home management which was studied. Regulation was defined to include checking, facilitating, and adjusting.

In summary, this report covers one part of the total project. A conceptual framework has been presented elsewhere (11); the larger context of the framework has been alluded to here; and the report of the empirical work related to two components, planning and controlling, follows.

METHODOLOGY

Observations in Homes

Following the delineation of the two major components, planning and controlling, and further explication of the framework, clarification of the relation of such concepts in the home was undertaken. Each of three homemakers⁵ with young children was interviewed concerning her plans for the following day. She was observed by a researcher the next day and re-interviewed the following day. In addition to her plans, the homemaker was questioned regarding her ideas of a good home manager.

Records from the observations included primary and secondary activities from the time the husband left for work in the morning until lunch in two cases and from lunch until dinner preparation in the other case. Based on the conceptual framework, the activities were classified when possible as planning, controlling, non-management, or other. Information was sought in the re-interview on repeat-use and single-use plans, source of plans, standards, control including adjusting, and non-management, as well as recall of the previous day's activities.

General Design of Interview Schedule

Interview questions and classifications were developed consistent with the framework for market and non-market situations. Market situations were defined as activities involving money transactions or exchanges. Activities related to the household not involving money transactions were considered non-market. By using both market and non-market situations, similarities and differences in the two situations for the same concept could be examined.

Initially, information from the Ohio observations previously described and case studies from a Cornell project⁶ were utilized in the formation of the inter-

view questions, along with the theoretical and operational definitions. The resultant interview was pre-tested with 15 homemakers and needed revisions then were made. Three additional homemakers were interviewed using the proposed final draft and minor changes were made in this interview schedule before it was used. The general outline of the interview with the market and non-market situations identified appears on page 5. The concepts, theoretical and operational definitions, interview questions, classifications, and rating scores appear in Appendix A.

Interview questions about each task or situation were asked in the following order which seemed to flow easily for the homemaker: housing choice, meal preparation, cleaning living room, photographs of a made bed (Appendix B), busy household situation (Appendix C), house cleaning, grocery shopping last time and in general, living room photographs (Appendix B), shoe shopping, family shopping situation (Appendix C), and a concluding general question.

Actual Interviews

Interviewing was conducted during May 1966. All interviewers were trained in the use of the schedule and provided with written instructions on procedures to follow when interviewing. A supervisor and four experienced interviewers were contracted for the majority of the interviewing. Difficulty was encountered with completion of the rural segment of the sample by the interviewing team and these were completed by members of the research staff. The average interview length was 56.3 minutes (s.d. = 13.52, s.e. = 1.01).

SAMPLE

Homemakers with children under 18 years of age in a husband-wife household living in middle income urban, suburban, and rural areas of Franklin County, Ohio, were represented. A quota of 60 homemakers was set for each area. Consistent with the proportion of employed homemakers with children under 18 in the population, a quota of 54 employed homemakers was established for the entire sample (Table 1).

Census tracts within \$1,000 of the median income of \$6,425 in Franklin County were included in the population for sampling, excluding those tracts with less than 500 families with children 18 years of age or under (18). Three tracts and three alternate tracts in urban, suburban, and rural areas were randomly selected.

Urban tracts selected were within the Standard Metropolitan Statistical Area for Columbus City as designated by the Bureau of the Census and not in the Suburban Directory (15). Suburban tracts selected were within the Standard Metropolitan Statis-

⁴From data collected for this project, Beyring (3) studied another attribute of standards—situationality.

⁵Homemaker or wife is used interchangeably throughout this report.

⁶Hatch 365, An Exploration of the Organizational Aspects of Homemaking, Alice J. Davey, Leader, 1961-64. Cornell University, Department of Household Economics and Management.

tical Area for Columbus City as designated by the Bureau of the Census and in the Suburban Directory. Rural tracts chosen were outside of Columbus City and the adjacent area but within Franklin County, with no community having a population exceeding 2,400 as estimated by the Ohio Department of Development for July 1, 1965 (14).

Specific instructions for sampling within the tracts appear in Appendix D.

CODING OF DATA

Open-end questions were used to allow for a wide range of responses in this exploratory study. The task of coding the data was both time-consuming and revealing of initial gaps in operational definitions, particularly in clarity of standard and sequence.

All aspects of the code were checked by the principal investigators and the actual coding was

Market and Non-Market Situations for Each Concept Used in the Interview.

Concepts	Situations	
	Market	Non-market
PLAN		
Standard		
Quality	Actual: housing choice	Hypothetical: living room photo
Quantity	Actual: housing choice	Hypothetical: living room photo
Attributes of Standard		
Clarity	Actual: shoe shopping	Actual: cleaning living room
Flexibility	Hypothetical: grocery shopping	Hypothetical: photographs of bedmaking
Reality	Actual: grocery shopping	Actual: cleaning living room
Complexity	Actual: grocery shopping	Actual: cleaning living room
Sequence		
Coordination	Hypothetical: family shopping	Hypothetical: busy household
Attributes of Sequence		
Clarity	Actual: grocery shopping	Actual: cleaning living room
Flexibility	Hypothetical: grocery shopping	Hypothetical: cleaning living room
Reality	Actual: grocery shopping	Actual: cleaning living room
Complexity	Actual: shoe shopping	Actual: cleaning living room
Frequency of Use of Plans		
Single-use	Actual: shoe shopping	Actual: meal preparation
Repeat-use	Actual: shoe shopping	Actual: meal preparation
CONTROL		
Checking	Actual: grocery shopping	Actual: cleaning living room
Adjusting	Actual: grocery shopping	Actual: cleaning living room
Facilitating	Actual: grocery shopping	Actual: grocery shopping

done by one assistant and checked by another. Points of disagreement were discussed by the assistants and then with one of the principal investigators, with agreement reached as to the most accurate code.

VARIABLES

Independent variables in the study included location of the household, occupation of wife, number of children under 6 years of age, years of marriage, education of wife, health of wife, index of social position, and persons per room. A summary of the descriptive information concerning the families is presented in Table 2. Definitions of terms appear in Appendix E.

A quota was set of 54 employed homemakers in

the sample. Among those homemakers employed outside the home, more than one-half were in occupational levels of skilled manual or above. There was considerable variation in the years of marriage from the mean of 16 years. Most wives were in good health and had a high school education. A majority of families were classified in Social Class IV, slightly under the middle group on the index of social position, using Hollingshead's system for the categorization (9).

Components of home management, specifically plan and control, were the major dependent variables. Plan included standard and sequence and attributes of each; control included checking, adjusting, and facilitating in a market and non-market situation.

ANALYSIS, INTERPRETATION, AND METHODOLOGICAL COMMENTS

For each dependent variable or managerial component, descriptive data are presented. Correlations and a least squares method of regression analysis (8) were utilized for each component. Results of the regression analysis and correlations which were significant at the .01 or .05 levels of significance are reported.

Plan

Standard

Quality. Quality for the market situation was based on the question, *At the time you moved here, what were you looking for in a place to live?* It was coded as the number of times an image or property of the house and/or grounds, the people, and the loca-

tion (other than distance or area) was mentioned. The mean number of quality items mentioned was 1.46 (s.d. = 1.29, s.e. = .096, N = 180). More homemakers reported properties or image of the house and/or grounds than people or location (Table 3). Greenbie also found that the house was more important than neighborhood (6).

Quality for the non-market situation was ascertained from the question, *How would you like the living room in this picture to appear if it were yours?* It was coded as the number of expressions of an image or property desired—suggestions for improvement without specific actions. The mean number of expressions was .80 (s.d. = .94, s.e. = .070, N = 180). Education of the wife accounted significant-

TABLE 1.—Sample Design for Employed and Non-employed Homemakers in Urban, Suburban, and Rural Areas of Franklin County, Ohio, 1966.

Area	Census Tract	Number	Total Population	Homemakers		
				Employed	Non-employed	Total
Number in Sample						
Urban		4.2	4,474	4	9	13
		46	8,241	7	16	23
		58	9,054	7	17	24
All				18	42	60
Suburban	WH	92-5	1,918	3	8	11
	CL	77-9	4,914	9	20	29
	WH	92-4	3,444	6	14	20
All				18	42	60
Rural	WA	62	2,057	3	8	11
	PL	98	3,213	6	14	20
	JA	97-9	5,586	9	20	29
All				18	42	60
Sample				54	126	180

ly for variance in the replies. As wife's education increased one unit, the non-market quality items increased .223 (Table 4).

Quantity. Quantity as reported in the market situation (housing choice) was coded as the number of times an expression of amount was mentioned. The responses were primarily related to space. Distance and cost together were mentioned about half as often as space (Table 3). The importance of space is consistent with other studies in which reasons for wishing to change housing or furnishings were primarily space (6, 10).

The mean number of responses for the quantity items for the market situation was 1.33 (s.d. = 1.22,

TABLE 3.—Description of Quality and Quantity Indicators for a Market Situation of Housing Choice (180 Urban, Suburban, and Rural Homemakers, Franklin County, Ohio, 1966).

Indicator	Number of Homemakers
Quality	
House-grounds	96
People-related	41
Location	54
Quantity	
Space	105
Distance	31
Cost or Price	25

TABLE 2.—Characteristics of Families as Represented by Independent Variables (180 Urban, Suburban, and Rural Homemakers, Franklin County, Ohio, 1966).

Independent Variable	Value			
	Number			
Qualitative Factors				
Location				
Urban	60			
Suburban	60			
Rural	60			
Employment of Wife				
Not employed	126			
Unskilled employees	7			
Machine operators and semi-skilled employees	15			
Skilled manual employees	2			
Clerical and sales workers, technicians, and owners of small businesses	26			
Business managers, proprietors of medium-sized businesses, and lesser professionals	3			
Higher executives, proprietors of large concerns, and major professionals	1			
Regression Factors	Number	Mean	s. d.	s. e.
Number of children under 6 years of age		.74	.96	.072
Years of marriage		16.49	7.64	.571
Education of wife		4.04	.98	.073
Graduate professional training	5			
Standard college or university graduation	8			
Partial college training	19			
High school graduate	99			
Partial high school	40			
Junior high school	9			
Health of wife		1.28	.65	.089
Good	146			
Fairly good	23			
Fair	7			
Poor	4			
Index of Social Position—actual score*		46.56	16.23	1.213
Social Class I (high)	14			
Social Class II	14			
Social Class III	36			
Social Class IV	84			
Social Class V	32			
Persons per room		.83	.25	.019

*Hollingshead Index of Social Position (9).

TABLE 5.—Significant Correlations for Quantity and Quality Components of Standard and Sequence Attributes for Market (M) and Non-market (NM) Situations (180 Urban, Suburban, and Rural Homemakers, Franklin County, Ohio, 1966).

Attribute-Component-Situation	Correlation Coefficient	Task	Measure
Quantity-M		Housing choice	Actual No.
Quality-M	.202**	Housing choice	Actual No.
Quantity-NM		Housing choice	Actual No.
Quantity-M	.166*	Housing choice	Actual No.
Quality-M		Housing choice	Actual No.
Quantity-NM	.193**	Housing choice	Actual No.
Quantity-NM		Housing choice	Actual No.
Clarity-sequence-NM	.153*	Cleaning living room	Actual No.
Quality-M		Housing choice	Actual No.
Clarity-sequence-NM	.189**	Cleaning living room	Actual No.

*p<.05

**p<.01

s.e. = .091, N = 180). Quantity and quality were significantly correlated for the market situation ($r = .202$, $p < .01$) (Table 5). The choice of housing may not have been sufficiently current to elicit predominant quality or quantity responses. On the other hand, quality and quantity for market situations may be interdependent concepts (7). The U. S. economic system is based on the assumption that variations in quality as well as quantity are reflected in price and the definition of standard setting is consistent with this assumption. Perhaps the price factor should have been excluded from the analysis.

Quantity in the non-market situation (living room photograph) was defined as an amount of work, without a specified relationship to image or property. Amount of work is reflected in the number of specific actions to be taken to give the room the desired appearance. The mean number of specific quantity actions mentioned was 7.25 with a deviation of 3.99 responses (s.e. = .299, N = 180).

TABLE 4.—Constant Estimates and Means for Variables with Significant F Values (180 Urban, Suburban, and Rural Homemakers, Franklin County, Ohio, 1966).

Dependent Variable	Independent Variable	Mean	Constant Estimate	F Value	df
PLAN					
Standard					
Quality—Non-market	Education of wife		—0.223	4.970	1,162
Quantity—Non-market	Years married		—0.148	9.616	1,162
Attributes of Standard					
Flexibility—Non-market	Location			8.059	2,162
	urban	3.096	0.294		
	suburban	2.773	—0.029		
	rural	2.538	—0.265		
	Occupation of wife			9.540	4,162
	not employed	1.824	—0.978		
	unskilled	1.880	—0.913		
	semi-skilled	1.861	—0.941		
	clerical, sales	2.149	—0.653		
	executive, major pro.	6.287	3.484		
	Persons per room		0.672	6.962	1,162
Reality—Non-market	Children under 6		—0.184	3.965	1,156
	Health of wife		—0.279	6.295	1,156
Complexity—Non-market	Health of wife		0.105	3.988	1,149
Sequence					
Coordination—Non-market	Index of social position		0.010	5.215	1,162
Attributes of Sequence					
Clarity—Non-market	Children under 6		—0.510	6.226	1,143
	Persons per room		1.694	6.271	1,143
Flexibility—Non-market	Health of wife		—0.643	7.080	1,175
	Index of social position		0.035	8.950	1,175
Reality—Non-market	Health of wife		—0.187	8.729	1,137
CONTROL					
Adjusting—Non-market	Health of wife		0.298	4.907	1,137

Variance in the case of quantity-non-market was accounted for by years of marriage (Table 4). As years of marriage increased one unit, quantity-non-market indicators decreased .148. Perhaps homemakers who have been married longer are less concerned with the details of straightening a room or are more accepting of a room which might appear messy to a younger homemaker.

It should be noted that variance in the non-market situation was accounted for, while that was not the case for the market situation. The use of a photograph for the non-market situation provided a common basis for reacting, while the market situation or the housing choice was made recently by some respondents and as long as 10 or more years ago for others. Perhaps the time differential biased the results.

Quantity for the market and non-market situations was significantly correlated ($r = .166, p < .05$), although the correlation was low (Table 5). This correlation provides support for quantity as one aspect of standard, regardless of market or non-market situation. However, another significant correlation has already been presented—quality-market and quantity-market. Such a correlation seems to support the importance of a quantity-quality relationship for a market situation, perhaps indicating that the situation should be primary in consideration of managerial components, particularly for standards. The correlation might be interpreted to mean that quality and quantity need not be considered separately, but simply examined as a standard.

Attributes of Standard

Four attributes of standard were examined in this study: clarity, flexibility, reality, and complexity. An additional attribute, situationality, was pursued by Beyring with data from this project (3). All five of the attributes will be discussed here.

Clarity. Clarity, the specification of quality and/or quantity, for the market situation, shoe shop-

ping for the wife, was identified as the number of indicators of standard mentioned. The indicators were categorized as specific, vague, or situation specific. Color, heel height, and material were considered to be specific indicators, while vague indicators were responses such as heels, pumps, and plain. Examples of situation specific indicators were wedding, funeral, and dance. The mean number of indicators for all three categories was 2.58 (Table 6).

Clarity for the non-market situation of cleaning the living room was ascertained from the number of indicators of standard which were categorized as specific (clean floors, dust or wax furniture, sweep or vacuum floor) or as vague (get rid of dust and dirt, restore order, make it presentable). The mean number of indicators for both categories was 1.72 (Table 6).

Flexibility. Flexibility of standard was conceptualized as the range of acceptable quality and/or quantity for a given situation and was operationally defined as an indication of willingness to change quality and/or quantity. For the market situation, the question concerned shopping for one type of meat, hamburger, and finding that only ground round was available at the store. One-half of the responses indicated an inflexible standard; i.e., the homemaker would not buy ground round, would go to another store, would send someone else to another store, or she always buys ground round anyway (Table 7).

TABLE 7.—Distribution of Flexibility of Standard for a Market Situation (180 Urban, Suburban, and Rural Homemakers, Franklin County, Ohio, 1966).

Flexibility	Number of Homemakers
Inflexible	91
Somewhat flexible	14
Flexible	71
No data	4

TABLE 6.—Description of Indicators of Clarity of Standard for a Market and Non-Market Situation (180 Urban, Suburban, and Rural Homemakers, Franklin County, Ohio, 1966).

Indicator	Mean	s. d.	s. e.	N
Market				
Total	2.58	2.14	.163	173
No data				7
Specific	1.70	1.15	.087	173
Vague	.71	.91	.069	173
Situation specific	.17	.76	.057	173
Non-market				
Total	1.72	1.28	.097	180
Specific	.91	1.14	.085	64
Vague	.82	.15	.011	132

The mean rating for flexibility of standard in a market situation was 1.92 (s.d. = .96, s.e. = .074, N = 169).

For the non-market situation of bedmaking, photographs of a bed made up in seven different ways were presented to the homemaker (Appendix B). The mean number of beds acceptable to the homemaker was 1.92 (s.d. = .84, s.e. = .062, N = 180).

Flexibility in the non-market situation of bedmaking varied with location, occupation of the wife, and persons per room. Homemakers in urban areas had the highest flexibility with a mean of 3.10 (s.e. = .189) acceptable beds, suburban homemakers were next with a mean of 2.77 (s.e. = .183) acceptable beds, and rural homemakers were least flexible with 2.54 (s.e. = .170) beds considered acceptable.

Homemakers who were employed at higher skill levels gave responses which indicated more flexibility than lower occupational levels. Clerical and sales workers reported a mean of 2.15 (s.e. = .143) acceptable beds, while the mean number of acceptable beds for semi-skilled workers was 1.86 (s.e. = .191). Non-employed homemakers reported a mean of 1.82 (s.e. = .064) acceptable beds (Table 4).

Flexibility increased with ratio of persons per room. As the ratio of persons per room increased one unit, flexibility increased .672; i.e., as the house was more crowded, the number of beds acceptable to the homemaker increased.

Reality. Reality of standard or the accomplishment of the task, consistent with the expectation was sought for the market situation by comparing expectations with actual occurrence in terms of quality, money, and amount purchased the last time the homemaker had shopped for groceries. The standard was considered realistic whenever all three—quality, money, and amount—were about the same as expected; somewhat realistic when two of the three were as expected; and unrealistic when one or none of the three was as expected. The mean rating was 2.21 (s.d. = .76, s.e. = .058, N = 173). Slightly more than one-third of the homemakers' responses were somewhat realistic and more than another one-third of the responses were realistic in the market situation.

For the non-market situation of cleaning, the homemaker was asked about the quality and amount of cleaning, again for expectations compared to actual occurrence. When both quality and quantity were as expected, the standard was coded as realistic; when either one was as expected, somewhat realistic; and when neither was as expected, the standard was considered unrealistic. The mean rating was 2.30 (s.d. = .78, s.e. = .060, N = 173). Realistic re-

TABLE 8.—Distribution of Reality of Standard for a Market and Non-market Situation (180 Urban, Suburban, and Rural Homemakers, Franklin County, Ohio, 1966).

Reality	Situation	
	Market	Non-market
	Number of Homemakers	
Unrealistic	42	37
Somewhat realistic	67	52
Realistic	71	86
No data		5*

*Question not asked if homemaker had not cleaned living room in the past month.

sponses were more than twice as frequent as those classified as unrealistic.

Reality in the non-market situation, cleaning the living room, varied with the number of children under 6 years of age and the health of the homemaker. As the number of children increased one unit, the reality of standard decreased .184 (Table 4). It would appear that the needs of small children may keep the homemaker from reaching her expectations.

In the non-market situation, as the health of the homemaker decreased one unit, reality of standard decreased .279. The homemaker who is not in good health may not be able to judge accurately what she can perform or how physically taxed she will be by the task.

The frequency distribution of reality of standard for both the market and non-market situations appears in Table 8. In both cases, more homemakers were realistic than somewhat realistic or unrealistic.

Complexity. Complexity of standard was theoretically defined as the interrelationship of persons and standards and operationally examined as the number of persons and tasks involved in a standard. For the market situation, grocery shopping, a standard was classified as complex if more than one person decided the amount of money to spend and/or did the shopping. If only one person decided the

TABLE 9.—Distribution of Complexity of Standard for a Market and Non-Market Situation (180 Urban, Suburban, and Rural Homemakers, Franklin County, Ohio, 1966).

Complexity	Situation	
	Market	Non-market
	Number of Homemakers	
Simple	127	140
Complex	44	39
No data	9*	1

*Question not asked if homemaker had not shopped for groceries in the past month.

amount of money to spend and did the shopping, the standard was considered simple. More than two-thirds of the homemakers had a standard for the market situation which was considered simple (Table 9). The mean rating was 1.26 (s.d. = .44, s.e. = .033, $N = 178$).

For the non-market situation, 39 homemakers reported a complex standard; i.e., more than one person did the cleaning and/or decided how the living room should look. Responses classified as simple (the person who did the cleaning decided how it should look) were given by more than three-fourths of the homemakers (Table 9). The mean rating was 1.22 (s.d. = .41, s.e. = .031, $N = 179$).

Health of the homemaker accounted significantly for differences in the complexity of standard for the non-market task. As the health of the homemaker decreased one unit, complexity increased .105. Such increased complexity may be due to extra help in cleaning the living room for homemakers who are not in good health.

Situationality. Situationality, defined as the relationship of the standard to existing conditions, was the focus of Beyring's thesis. Situationality was considered as "indication of adapting the standard to existing conditions" (3). Situationality of standard in market activities was lower than situationality in non-market activities; i.e., homemakers apparently related their standard more to existing conditions in non-market or household activities than in market activities (3).

Beyring (3) reported that situationality of standards was associated with flexibility in a market activity ($r = .185$, $N = 114$, $p < .05$). "This correlation, although low, seems reasonable in that the wider the range of standard, the more the homemaker relates her standard to existing conditions. The positive correlation occurred in market tasks, but not in non-market tasks."

She reported that the situationality sum for market activities varied significantly with the number of children 5 years of age and under ($F = 4.64$, d.f. = 1,113, $p < .05$). "For each additional child 5 years of age or under, situationality in the market decreased by .233. In other words, the more children 5 years of age and under, the less situational or the less the homemaker related her standard to existing conditions."

Situationality for a non-market activity, cleaning the living room, varied significantly with age of homemaker ($F = 4.976$, d.f. = 1,113, $p < .05$) and years of marriage ($F = 5.081$, d.f. = 1,113, $p < .05$). "Due to the fact that age of homemaker and years of marriage are not independent, the regression coefficients compensate for each other." (3)

Sequence

Sequence of action was examined as ordering parts of a task or ordering among tasks which could be independent or coordinated. Independent tasks were those with no relationship other than a sequential listing. Coordinated tasks were those related through overlapping (simultaneous attention to two tasks) or dovetailing (intermittent attention to tasks until completion).

For a hypothetical market situation, shopping for a number of items, tasks were coded as coordinated or independent. The number of items coordinated was used for the analysis. The mean number of items coordinated for the market situation was 3.10 (s.d. = 1.94, s.e. = .145, $N = 180$) from a total of seven items.

In the hypothetical non-market situation of a busy homemaker, tasks were also coded as independent or coordinated. For the analysis, the number of coordinated tasks was used. The mean number of tasks coordinated in the non-market situation was .32 (s.d. = .71, s.e. = .053, $N = 180$) from a total of six tasks. The limited coordination of tasks for the non-market situation could be a function of the hypothetical situation. Perhaps the situation was not really meaningful to the homemakers, although little evidence was found for such during either the pre-testing or the actual interviewing.

Variance in coordination in the non-market situation was significantly accounted for by social position. As the social position score increased one unit (an actual decrease in social position), coordination increased .01; i.e., an increase in coordination accompanied a decrease in social position.

Attributes of Sequence

Clarity. Clarity of sequence, or specification of order within or among tasks, was ascertained for the market situation of shopping for groceries by having the homemaker report how she shopped for groceries inside the store. Responses were scored on a 3-point basis. The mean rating was 1.80 (s.d. = .87, s.e. = .072, $N = 148$). Responses were classified as low clarity of sequence if no further specification other than going up and down the aisles was mentioned, as moderate clarity of sequence if foodstuffs or categories were mentioned, and as high clarity if items shopped for were specified. More than two-fifths of the homemakers' responses indicated low clarity of sequence (Table 10). The task of grocery shopping may be routine enough so that the homemaker did not give details.

For clarity of sequence, non-market, the homemaker was asked the order in which she cleaned the living room. Responses were classified according to

TABLE 10.—Description of Clarity of Sequence for a Market and Non-market Situation (180 Urban, Suburban, and Rural Homemakers, Franklin County, Ohio, 1966).

Clarity Rating	Market		Non-market	
	Specification	Homemakers	Homemakers	Operations
			Number	
None		2	1	
Low	Up or down aisles	75	32	1-2
Moderate	Foodstuffs or categories	37	81	3-4
High	Items specified	42	53	5 or more

the number of operations mentioned in the order of cleaning the living room. The mean number of operations was 3.94 (s.d. = 1.72, s.e. = .132, N = 172). When one or two operations were mentioned, the response was classified as low clarity of sequence, three or four operations as moderate clarity, and five or more operations as high clarity. Clarity of sequence was somewhat greater for the non-market than the market situation. In the non-market situation, more than one-third of the homemakers' responses indicated moderate clarity of sequence (Table 10).

Clarity of sequence, non-market, varied significantly with the number of children under 6 years of age and persons per room. As the number of children under 6 years of age increased one unit, clarity of sequence decreased .51. Presence of young children may actually lessen clarity of sequence or order. However, cleaning the living room may be less thorough with young children than with older children and consequently involve fewer operations. As persons per room showed a one-unit increase, clarity of sequence increased 1.694. Perhaps as the home becomes more crowded, the homemaker is forced to be more clear in specifying order within or among tasks.

TABLE 11.—Distribution of Flexibility of Sequence for a Market and Non-market Situation (180 Urban, Suburban, and Rural Homemakers, Franklin County, Ohio, 1966).

Flexibility	Situation	
	Market	Non-market
	Number of Homemakers	
Inflexible	10	29
Somewhat flexible	98	58
Flexible	63	87
No data	9*	6

*Question not asked if homemaker had not shopped for groceries in the past month.

Flexibility. Flexibility of sequence was theoretically defined as the range of acceptable order of tasks and operationally as an indication of willingness to change the order of tasks. Flexibility of sequence for the market situation, regular grocery shopping, was sought by examining what the homemaker would do if she could not go shopping at her regular time. Responses were scored on a 3-point rating scale. The mean rating was 1.79 (s.d. = 2.42, s.e. = .184, N = 175).

Examples of the 10 responses coded as inflexible included: it wouldn't happen, would send someone else, would wait until next regularly scheduled time, would go as soon as possible (Table 11). Responses indicating a somewhat flexible sequence were given by more than one-half of the homemakers. Examples of such responses were that the homemakers: would go the next day, would go at an alternate time for regular shopping, would buy necessities and make do, or a combination of a flexible and an inflexible response. One-third of the homemakers gave responses coded as flexible: would go at another time (but not as part of a regularly schedule time) or would go at either of two different times.

To ascertain flexibility of sequence for the non-market situation of cleaning the living room, the homemaker was asked what she would do if she could not clean her living room when she had expected. Responses by 29 homemakers indicating an inflexible sequence included: wouldn't happen, would have someone else clean it, would wait until the next regularly scheduled cleaning time, would clean it as soon as possible, wouldn't clean. A somewhat flexible sequence response was given by about one-third of the homemakers: would do it the next day, would do it at an alternative time for cleaning, would do a quick touch-up and let go, would do it later with certain conditions specified, or a combination of a flexible and an inflexible response. Flexible responses were given by almost one-half of the homemakers. The mean rating of responses was 1.99 (s.d. = 2.03, s.e.

= .154, N = 175). Responses indicating that the homemakers would clean at another time or would clean later were considered flexible.

Health of the homemaker and index of social position accounted significantly for the variance in flexibility of sequence-non-market. As the health of the homemaker decreased one unit, flexibility decreased .643. As the index of social position changed one unit, flexibility decreased .035; i.e., as the social position decreased (score increased), flexibility decreased. The mean flexibility score for the non-market situation was higher than the market situation.

Reality. Reality of sequence was theoretically defined as the feasibility of order within or among task(s) and was operationally examined as the completion of task(s) within the expected order(s) and time.

For the market situation, combination of grocery shopping with other errands, responses were classified as realistic if shopping and other tasks were completed in the time *and* order expected, somewhat realistic if the shopping and other tasks were completed in the order *or* time expected, and unrealistic if neither the time nor the order completed was as expected. Responses for more than three-fourths of the homemakers were realistic (Table 12).

For the non-market situation of cleaning the living room, realistic responses were those in which the order the living room was actually cleaned was the order previously considered. If the order used was somewhat the order the homemaker had thought she would use, the response was classified as somewhat realistic. The response was considered unrealistic if the homemaker did not use the order she thought she would use. As in the market situation, sequence for the majority of homemakers was realistic (Table 12). The distribution of responses was highly skewed toward realistic. Results related to reality should be viewed with this in mind.

Reality of sequence for the non-market situation varied significantly with the health of the homemaker. As the health of the homemaker decreased, reality of sequence decreased .187.

Complexity. Complexity of sequence was defined as the interrelationship of persons and tasks involved in a situation. For the market situation, shoe shopping, complexity of sequence was defined as simple when the homemaker shopped alone and only for shoes; somewhat complex when she shopped alone but for more than shoes; and complex when she shopped with someone but only for shoes or shopped with someone and did more than shoe shopping. Somewhat complex and complex sequences were reported by more than two-thirds of the homemakers

TABLE 12.—Description of Reality of Sequence for a Market and Non-market Situation (180 Urban, Suburban, and Rural Homemakers, Franklin County, Ohio, 1966).

Reality	Situation	
	Market	Non-market
	Number of Homemakers	
Unrealistic	9	7
Somewhat realistic	25	7
Realistic	137	158
No data or does not apply	9*	8**

*No data or homemaker did not shop or did grocery shopping only.

**No data or homemaker did not clean or did not specify an order.

(Table 13). The mean rating was 2.18 (s.d. = .75, s.e. = .059, N = 163).

Complexity of sequence for the non-market situation of cleaning the living room was defined similarly—simple when one person cleaned the living room and that was the only task; somewhat complex when one person cleaned the living room and did one or more other tasks; and complex when more than one person cleaned the living room or more than one person cleaned and did more than one task. In the non-market situation, one-third of the homemakers reported a simple sequence; one-half, a somewhat complex sequence; and only 12, a complex sequence (Table 13). The mean rating was 1.71 (s.d. = .59, s.e. = .045, N = 174).

Relationship of Attributes of Standard and Sequence

Having measured the same attributes for standard and sequence for market and non-market situations, it might be expected that the like attributes would be correlated. There were, however, no significant market-non-market correlations of either standard or sequence with any one of the attributes.

TABLE 13.—Description of Complexity of Sequence for a Market and Non-market Situation (180 Urban, Suburban, and Rural Homemakers, Franklin County, Ohio, 1966).

Complexity	Situation	
	Market	Non-market
	Number of Homemakers	
Simple	33	63
Somewhat complex	67	99
Complex	63	12
No data	17*	6

*No data resulted from the homemaker's inability to recall whether she had shopped alone or with others or had combined shoe shopping with other errands.

TABLE 14.—Significant Standard-Sequence Correlations for the Same Attributes for Market (M) and Non-market (NM) Situations (180 Urban, Suburban, and Rural Homemakers, Franklin County, Ohio, 1966).

Attribute-Component-Situation	Correlation Coefficient	Task	Measure
Clarity-standard-NM		Cleaning living room	Actual No.
Clarity-sequence-NM	.259**	Cleaning living room	Actual No.
Clarity-standard-M		Shoe buying	Actual No.
Clarity-sequence-NM	.164*	Cleaning living room	Actual No.
Clarity-standard-NM		Cleaning living room	Actual No.
Clarity-sequence-M	.223**	Grocery shopping	Rating
Reality-standard-M		Grocery shopping	Rating
Reality-sequence-M	.185*	Hypothetical grocery shopping	Rating
Reality-standard-NM		Cleaning living room	Rating
Reality-sequence-NM	.190*	Cleaning living room	Rating
Complexity-standard-NM		Cleaning living room	Rating
Complexity-sequence-NM	.269**	Cleaning living room	Rating

* $p < .05$

** $p < .01$

TABLE 15.—Significant Standard-Sequence Correlations for Mixed Attributes for Market (M) and Non-market (NM) Situations (180 Urban, Suburban, and Rural Homemakers, Franklin County, Ohio, 1966).

Attribute-Component-Situation	Correlation Coefficient	Task	Measure
Clarity-sequence-NM		Cleaning living room	Actual No.
Flexibility-sequence-M	— .169*	Grocery shopping	Rating
Clarity-standard-NM		Cleaning living room	Actual No.
Flexibility-sequence-M	— .197*	Grocery shopping	Rating
Complexity-standard-NM		Cleaning living room	Rating
Clarity-sequence-M	.173*	Grocery shopping	Rating
Complexity-standard-NM		Cleaning living room	Rating
Clarity-standard-NM	.150*	Cleaning living room	Actual No.
Flexibility-sequence-NM		Cleaning living room	Rating
Reality-sequence-NM	.181*	Cleaning living room	Rating
Flexibility-sequence-M		Grocery shopping	Rating
Complexity-sequence-M	— .172**	Shoe shopping	Rating
Flexibility-sequence-M		Grocery shopping	Rating
Complexity-standard-M	— .151*	Grocery shopping	Rating
Reality-sequence-M		Grocery shopping	Rating
Complexity-sequence-NM	— .220**	Cleaning living room	Rating
Reality-sequence-M		Grocery shopping	Rating
Complexity-standard-NM	— .182*	Cleaning living room	Rating

* $p < .05$

** $p < .01$

Clarity was the only attribute with significant correlations for three of the four possible standard-sequence combinations (Table 14). Standard-sequence correlations for reality were significant for the market and non-market situations; for complexity, the non-market situation represented the only significant standard-sequence combination. Flexibility was the only attribute with no significant correlations of the possible market-non-market standard-sequence combinations.

The several significant correlations for the attributes of standard and sequence indicate that standard and sequence are not independent. Perhaps plan should be considered as a whole with separate but related parts.

With mixed standard-sequence attributes for market-non-market combinations, clarity was involved in four, flexibility in five, reality in three, and complexity in six correlations (Table 15). Correlations for flexibility of sequence for market situations were negative in four combinations with other market situations involving complexity and clarity of standard and sequence. In addition, there was a negative correlation for non-market-coordination with the flexibility attribute for standard in the market situation. These relationships suggest a possible tendency for a wide range of flexibility to accompany less precise plans. On the other hand, the positive flexibility-reality correlation may indicate that flexibility fosters reality.

In addition to the two negative correlations with flexibility, complexity was also negatively correlated with two reality-sequence-market situations. Two complexity-clarity correlations were positive, as was one flexibility-reality combination. Perhaps involvement of persons and tasks complicated realistic judgments in task completion. The skewed distribution for reality-sequence for both market and non-market situations indicates, however, that additional work is needed on the measure.

Neither the task nor the measure for the market or non-market situation seems to be primary in the correlations, since there is no identifiable pattern in the situations, measures used, and correlations. For flexibility in the non-market situation, variance was accounted for in both standard and sequence, although none of the explanatory factors was the same. Reality for the non-market situation varied significantly with the health of the homemaker for both standard and sequence.

Frequency of Use of Plans

The frequency of use of plans was determined for the market situation from inquiry about purchase of shoes—whether or not the same brand was usually bought, the same store used, or a specified amount

TABLE 16.—Frequency of Use of Plans for a Market and Non-market Situation (180 Urban, Suburban, and Rural Homemakers, Franklin County, Ohio, 1966).

	Frequency of Use			
	Market		Non-market	
	Repeat	Single	Repeat	Single
	Number of Homemakers			
Standard				
Quality	53	127	115	65
Quantity	114	66	104	76
Sequence	93	87	36	144

usually spent for shoes. Answers were coded for quality and quantity components for a single-use or repeat-use standard.

The quality component was more prevalent for single-use plans for market situations than for repeat-use plans, while the quantity component was more important in the repeat-use plans (Table 16). Sequence was almost the same for single-use as for repeat-use plans for the market situation.

For the non-market situation, time and meal patterns for evening meal preparation were the basis for frequency of use of plans. Quality and quantity aspects were more frequently reported for repeat-use plans than for single-use plans. Sequence was very important in single-use plans compared to repeat-use plans for the non-market situation.

Control

Checking. Checking was theoretically defined as examination of actions and operationally considered as examination of standards and sequence of actions. Checking of standards for the market situation, grocery shopping, was ascertained from responses to the questions, *How were you sure you had the kinds and quality of frozen and canned foods you wanted?* and *How did you know you had the right amount of a certain product?* Purchasing by brand

TABLE 17.—Description of Checking of Standard and Sequence for a Market and Non-market Situation (180 Urban, Suburban, and Rural Homemakers, Franklin County, Ohio, 1966).

Checking	Situation	
	Market	Non-market
	Number of Homemakers	
Standard		
Quality	127	23
Quantity	65	35
Sequence	114	25

TABLE 19.—Description of Adjusting of Standard and Sequence for a Market and Non-market Situation (180 Urban, Suburban and Rural Homemakers, Franklin County, Ohio 1966).

Adjusting	Situation	
	Market	Non-market
	Number of Homemakers	
Standard	109	
Quality		53
Quantity		69
Sequence		
Time	46	33
Pattern	17	

name and checking the label for grade or contents were reported by almost three-fourths of the homemakers (Table 17). Checking the size of the package, number of servings or mentioning person-meal related items such as knowing the menu, the number of meals to be served, or the number of persons to be served were considered to be checking of quantity. Responses of the homemakers indicated that slightly more than one-third checked quantity (Table 17).

Checking of sequence for the market situation was determined from responses indicating that the homemaker had a way of avoiding backtracking the last time she shopped. Approximately two-thirds of the homemakers had some way of avoiding backtracking (Table 17).

Checking of standard for the non-market situation, cleaning the living room, was defined for quality as checking before actual cleaning whether or not items needed to be cleaned and for quantity as checking whether or not things needed to be done. In the non-market situation, more than three-fourths of the homemakers did not check quality or quantity. This is considerably less than in the market situation (Table 17).

Checking of sequence for the non-market situation, cleaning the living room, was determined from evidence of as much cleaning being performed as the homemaker desired; i.e., worked a certain time, worked until done. Checking of sequence in the non-market situation was performed by less than one-fifth of the homemakers. This is much lower than in the market situation (Table 17).

For further analysis, checking of standard and/or sequence was combined into a total score (Table 18). Replies for checking of standard and checking of sequence in both the market and non-market situations were categorized as no checking (neither standard nor sequence checked); little checking (quality or quantity checked and sequence not checked);

moderate checking (standard *or* sequence checked); and much checking (standard *and* sequence checked).

For the market situation, the mean rating was 1.93 (s.d. = .78, s.e. = .062, N = 162). In the non-market situation, the mean rating was .789 (s.d. = .96, s.e. = .975, N = 166). Thus, the extent of checking was much lower in the non-market situation, cleaning the living room, than in the market situation, grocery shopping. Twice as many homemakers in the market situation as in the non-market situation did much checking. Nine times as many homemakers in the market situation as in the non-market situation did moderate checking (Table 18).

Adjusting. Adjusting was examined as a change in standard or sequence of action, with a change in standard being a change in quality or quantity and a change in sequence being a change in the order of persons or tasks involved. For the market situation, grocery shopping, if the homemaker purchased items which she had not thought she would, an adjustment in standard was considered to have occurred. Almost two-thirds of the homemakers adjusted their standards (Table 19). If the homemaker shopped at a time different from that which she had originally hoped or if she followed a different pattern from that which she had expected, an adjustment of sequence was considered to have occurred. In the market situation, almost two-thirds of the homemakers did not adjust time or pattern of shopping (Table 19).

In the non-market situation, cleaning the living room, an adjustment of standard was considered to have occurred if the quality or quantity of the cleaning was changed. If the quality of cleaning was either better than or not as good as expected, an adjustment of the quality aspect of standard was considered to have taken place. Quality of cleaning was adjusted by approximately one-third of the homemakers (Table 19). If the amount of cleaning accomplished was more or less than expected by the

TABLE 18.—Distribution of Checking for a Market and Non-market Situation (180 Urban, Suburban, and Rural Homemakers, Franklin County, Ohio, 1966).

Checking	Situation	
	Market	Non-market
	Number of Homemakers	
Little checking	32	59
Moderate checking	86	9
Much checking	36	18
No checking	8	80
No data	18*	14**

*Question not asked if homemaker had not shopped for groceries in the past month.

**Question not asked if homemaker had not cleaned living room in the past month.

homemaker, an adjustment in the quantity aspect of standard was considered to have taken place. Quantity of cleaning was adjusted by almost two-fifths of the homemakers.

Adjustment of sequence for the non-market situation was defined as a change in the time for cleaning the living room. The time for cleaning was changed by about one-fifth of the homemakers (Table 19). Adjusting of standards and sequence in the non-market situation was also limited in relation to the market situation.

As with checking, the more extensive adjustment of plans in the market than the non-market situation was apparent when responses for standard and sequence were combined. For market and non-market situations, replies for adjusting of standards and adjusting of sequence were combined and categorized as no adjusting, if neither standard nor sequence was changed; little adjusting, if the standard was not changed and sequence was partially changed; and adjusting, if standard *or* total sequence were changed. If both standard *and* sequence changed, a new plan was considered to have evolved. For the market situation, the mean adjustment rating was 1.41 (s.d. = .91, s.e. = .070, N = 169). In the non-market situation, it was .98 (s.d. = .98, s.e. = .077, N = 164). In the market situation, more than one-half of the homemakers adjusted—changed either standard or total sequence (Table 20). There were more new plans for the non-market than market situation, even though there was generally less adjusting (Table 20).

Adjusting in the non-market situation varied significantly with the health of the homemaker (Table 4). As there was a one unit decrease in the health of the homemaker, adjusting increased .298. Perhaps the homemaker who is in poor health must make more adjustments as demands exceed her capacity.

Facilitating. Facilitating was theoretically defined as assistance to the progress or flow of action and was operationally examined as the indication of assistance to progress or flow through personal, family, or physical factors.

Family-Market. Assistance given the homemaker by the family in the market situation, grocery shopping, was ascertained from responses to the question, *Is there anything about your family situation which makes your grocery shopping easier or harder than it otherwise might be?* Family help and preferences were each given by about one-fifth of the homemakers as making shopping easier (Table 21). Family preferences were also given by about one-fifth of the homemakers as making shopping harder. Family factors were not mentioned as contributing to the ease

TABLE 20.—Distribution of Adjusting for a Market and Non-market Situation (180 Urban, Suburban, and Rural Homemakers, Franklin County, Ohio, 1966).

Adjusting	Situation	
	Market	Non-market
	Number of Homemakers	
No adjusting	44	70
Little adjusting	17	38
Adjusting	103	46
New plan	5	10
No data	11	16

or difficulty of grocery shopping by almost one-half of the homemakers.

Personal-Market. Personal factors which were assets to the homemaker in her grocery shopping were ascertained from responses to, *Is there anything about you or how you go about the grocery shopping that makes it easier or harder?* Shopping habits were the major personal factor making grocery shopping easier as reported by almost one-half of the homemakers. While one-third of the homemakers did not mention any personal factors as making shopping easier, more than two-thirds did not indicate any personal factors which made shopping harder (Table 21).

Physical-Market. Physical factors which assisted the homemaker in her grocery shopping were ascertained from responses to, *Is there anything about the places you shop which makes the shopping easier or harder than it might be otherwise?* Location or type of store, mentioned by almost one-third of the homemakers, was the major physical factor making grocery shopping easier. Approximately two-fifths of the homemakers did not mention physical factors as making shopping easier and approximately three-fourths did not mention them as making shopping harder (Table 21).

Family-Non-market. In the non-market situation, cleaning the living room, assistance given the homemaker by the family was ascertained from responses to, *Is there anything about your family situation which makes cleaning the living room easier or harder than it otherwise might be?* Family help was the major asset which made cleaning the living room easier and living habits was the major factor which made cleaning harder (Table 21). Family factors were not mentioned by more than one-half of the homemakers as making cleaning easier nor by one-third as making cleaning harder.

Personal-Non-market. Personal factors which were assets to the homemaker in cleaning her living room were determined from responses to, *Is there anything about you or how you go about cleaning that*

makes it easier or harder? Work habits were the most frequently mentioned factor in cleaning the living room (Table 21). More than one-half of the homemakers did not mention personal factors as making cleaning easier and two-thirds of the group did not mention personal factors as making cleaning harder.

Physical-Non-market. Physical factors which assisted the homemaker in cleaning the living room were determined from responses to, *Is there anything about the living room or house that makes it easier or harder to clean than it might be otherwise?* Amount and arrangement of space in the house, as expressed by one-fourth of the homemakers, was the greatest asset in making cleaning easier. Characteristics of the furnishings or of the house construction were given by approximately one-fifth of the homemakers as the greatest factors in making cleaning harder (Table 21). No mention was made of physical factors as making cleaning easier or harder by approximately one-half of the homemakers.

Extent of Facilitating. Aggregate responses for personal, family, and physical factors were classified as no facilitating, if neither family nor personal nor physical factors were mentioned; as little facilitating if either family, personal, or physical factors were mentioned; as moderate facilitating, if two of the three factors were mentioned; and as much facilitating, if all three factors were mentioned.

Twice as many homemakers expressed much facilitating; i.e., mentioned all three factors in the market situation as in the non-market situation (Table 22). About one-third more homemakers in the market situation than in the non-market situation had moderate facilitating. Again, as with checking and adjusting, the extent of facilitating was more pronounced in the market than in the non-market situation. The mean extent of facilitating was 1.76 (s.d. = .91, s.e. = .068, N = 180) for the market situation. In the non-market situation, the mean was 1.28 (s.d. = .97, s.e. = .072, N = 180). Facilitating-market was significantly correlated with facilitating-non-market (Table 23).

TABLE 21.—Description of Facilitating for a Market and Non-Market Situation (180 Urban, Suburban, and Rural Homemakers, Franklin County, Ohio, 1966).

Circumstance	Situation			
	Market		Non-market	
	Facilitating			
	Easier	Harder	Easier	Harder
Family				
Composition, health, age	3	30	4	40
Preferences	37	32		
Help	38	1	37	1
Activities	6	14	4	17
Habits			23	45
Other or combination	10	14	5	14
All	94	91	73	117
Personal—homemaker				
Health or age, knowledge, skills, motivation	16	15	12	25
Habits	85	22	50	24
Other or combination	15	2	10	7
All	116	39	72	56
Physical				
Arrangement or layout	23	6	47	27
Location or type	55	18	1	7
Store policies	26	11		
Furnishings or construction			21	34
Task characteristics or equipment			8	10
Other or combination	2	3	8	6
All	106	38	85	84

Relationship of Attributes of Standard and Sequence and Control Components

Correlations between the standard and sequence attributes and control components were examined for significant relationships between market and non-market situations for the same attributes and components (Table 23).

For checking, there was only one significant correlation, checking-market and complexity-standard-non-market, which is not particularly meaningful since it is between a market-non-market situation and since there were no other similar correlations.

The consistent negative correlations for adjusting and reality of standard for both market and non-market and for sequence non-market only lend credi-

TABLE 22.—Distribution of Facilitating for a Market and Non-Market Situation (180 Urban, Suburban, and Rural Homemakers, Franklin County, Ohio, 1966).

Facilitating	Situation	
	Market	Non-market
	Number of Homemakers	
No facilitating	17	44
Little facilitating	50	64
Moderate facilitating	73	50
Much facilitating	40	22

TABLE 23.—Significant Correlations for Standard and Sequence Attributes and Control Components for Market (M) and Non-market (NM) Situations (180 Urban, Suburban, and Rural Homemakers, Franklin County, Ohio, 1966).

Attribute-Component-Situation	Correlation Coefficient	Task	Measure
Checking-M		Grocery shopping	Rating
Complexity-standard-NM	— .158*	Cleaning living room	Rating
Adjusting-NM		Cleaning living room	Rating
Reality-sequence-NM	— .204**	Cleaning living room	Rating
Adjusting-M		Grocery shopping	Rating
Reality-standard-M	— .252**	Grocery shopping	Rating
Adjusting-NM		Cleaning living room	Rating
Reality-standard-NM	— .788**	Cleaning living room	Rating
Adjusting-NM		Cleaning living room	Rating
Flexibility-sequence-NM	— .159*	Cleaning living room	Rating
Adjusting-M		Grocery shopping	Rating
Flexibility-standard-M	.217**	Hypothetical grocery shopping	Rating
Facilitating-M		Grocery shopping	Rating
Facilitating-NM	.350**	Cleaning living room	Rating
Facilitating-M		Grocery shopping	Rating
Clarity-sequence-NM	.202**	Cleaning living room	Actual No.
Facilitating-NM		Cleaning living room	Rating
Clarity-standard-NM	.213**	Cleaning living room	Actual No.
Facilitating-M		Grocery shopping	Rating
Clarity-standard-NM	.201**	Cleaning living room	Actual No.
Facilitating-NM		Cleaning living room	Rating
Clarity-standard-M	.161*	Shoe shopping	Actual No.
Facilitating-M		Grocery shopping	Rating
Coordination-sequence-NM	— .225**	Hypothetical busy homemaker	Actual No.

* $p < .05$

** $p < .01$

bility to the concepts which are purported to be measured. Completion of tasks within expected order or time would preclude a change in planned sequence or standard. The tasks within market and non-market situations were the same for adjusting and reality.

For adjusting and flexibility of standard for the market situation, the tasks used for measuring the concepts were similar and the correlation was positive. For adjusting and flexibility of sequence, non-market, the tasks differed and the correlation was negative. No explanation other than possibly the difference in the task is offered.

Facilitating and clarity for standard were significantly correlated for non-market situations. For both clarity and facilitating, the homemakers were asked open-ended questions. For clarity, the actual number of indicators was used as a measure. For facilitating, a rating was given in relation to the presence of personal, family, and physical situation responses. Even with the methodological differences, the authors interpret as meaningful the consistent relationship of clarity of standard or sequence and facilitating for market and non-market situations.

IMPLICATIONS FROM RESEARCH

Components

Standard. The correlations of quality and quantity factors in the market situation and between the market-non-market situations suggest that further clarification of qualitative-quantitative relationships of standards in home management represents a fruitful area of research. Quantitative factors were correlated for the market-non-market situations, but qualitative ones were not. The question arises as to whether these factors are independent or additive in defining the standards to be met in management. The answer has implications for the structure of the management framework discussed earlier.

Variance was accounted for in the least squares regression analysis for non-market situations only. Situations may have differential effects on management and such influences need to be clarified. Perhaps recall differs for market and non-market situations.

Sequence. Coordination was the major component of sequence which was examined. Relatively more market than non-market tasks were coordinated. In addition, there were no correlations between coordination and standard in the analysis of these concepts separate from their attributes. There are, therefore, no implications of the relationship of these basic components in the total managerial framework.

The measure used for evidence of sequence in a non-market situation may have complicated the

analysis since interrelating of tasks was the basis. Perhaps an actual situation instead of the hypothetical *busy homemaker* situation would have elicited more evidence of sequence. Coordination within individual tasks could have taken place and been unrecorded. Such analysis was too complex for this broadly based study.

The predominance of sequence in single-use more than repeat-use plans in a non-market situation and differences in repeat-use and single-use plans in a market situation indicate the need for investigating both situations.

Control. For the measures used, there was either less awareness or less involvement of controlling in the non-market than in the market situations. The relation of this difference to situationality or degree of routine of market compared to non-market tasks needs further investigation.

Since the components of control were defined in terms of their relation to standard and sequence, no interrelations within control were anticipated. The non-market situation of adjusting was the only one for which a factor (health) significantly accounted for variance.

Variance was significantly accounted for in the non-market situations only. None of the factors (location, employment of wife, number of children, years of marriage, education of wife, health, index of social position, or persons per room) significantly accounted for variance in market situations in the least squares regression analysis of this study. All of the factors contributed to variance in non-market situations.

Beyring's earlier report (3) indicated an effect on market situationality of number of children. No explanation for the limited influence on market situations of these factors is suggested.

Attributes

The attributes of clarity, flexibility, reality, and complexity gave continuity to the study of managerial components and helped to move toward clarification of their interrelationships. The attributes had varying relationships to components, indicating differences in the nature of the attributes or components.

Standard and Sequence. The significant correlations of attributes for standard and sequence within and between market and non-market situations gave support to the proposal that standard and sequence are interrelated components of plans. A clear and realistic standard accompanied clear and realistic sequence but there was limited evidence for complexity and flexibility. Is it inconsistent for a flexible standard to accompany flexible sequence? Would the total plan be too flexible to be effective? Or is a lack of consistency between flexibility of standard and sequence due to the measures employed?

The negative correlations of flexibility with clarity suggest that less specification of plans may be coordinate with a wide range of acceptable quality and quantity or order. Establishing the limits which make greater flexibility and lesser clarity advantageous or disadvantageous alternatives for each other could be helpful to our understanding of planning. The further implication of a positive relation of flexibility to reality adds another dimension which also may have advantageous or disadvantageous limits.

Complexity as a reflection of the involvement of persons and tasks had uncertain implications. Complexity was defined in the organizational sense proposed by Nichols (12) of the involvement of persons and tasks. Adding the potential for complexity within tasks relating to standards and sequence suggests a need for comprehensive analysis of the attribute. For example, the variety of factors relating to the demands and resources of a situation can critically affect complexity. The whole question of the relation of organization to managerial components is an important area needing study.

Control. The attributes of standard and sequence contributed evidence on the interaction of only two components of control—adjusting and facilitating. Negative correlations of adjusting and reality and positive correlations of adjusting and flexibility with similar tasks were logically consistent with the functional interrelationships of the concepts as set forth by the framework.

A positive relationship of clarity and checking, also with similar tasks, would have been equally logical and the lack is an area for further review of conceptualization and methodology.

The positive relationship of clarity and facilitating was viewed as meaningful. A positive relationship of complexity and facilitating was also antici-

pated, assuming assistance to progress or flow of actions is needed, when there is greater involvement of tasks or persons. Facilitating also needs to be considered in relation to some measure of the internal complexity of tasks.

Other. As indicated earlier, the purpose of this study was to identify major components of home management and study their structural-functional aspects in relation to the framework set forth. The dynamic aspects of how the components interact as a process of thought and action in a problem situation were not pursued.

Emphasis was therefore placed on: (a) factors useful in clarifying the nature of the components rather than how actual facts may be processed in problem-solving; (b) implications from major resource orientations rather than actual resources (market situations had the major constraint of money, although time was involved, and non-market situations had the major constraint of time, although money was potentially influential); (c) evidence of choices rather than the delineation of actual alternatives; (d) implications of values and goals, evidenced by extrinsic values as criteria for quality and quantity in standards, rather than identification of the underlying values and goals; (e) implications from plans, their attributes, and their control, rather than actual planning and controlling processes; and (f) implications of decisions rather than decision-making processes.

Need for further research from the structural-functional standpoint has been discussed. It follows that the dynamic aspects just reviewed, and many more, are all necessary areas of research. It is hoped that this investigation will contribute positively to such efforts. Factor analysis of the present data could be helpful.

SUMMARY

Purposes of Project. To isolate components and to develop a conceptual framework for home management and to identify these components in homes were the purposes of the project. This report is particularly concerned with the field study related to the latter purpose. Two components, plan and control, were the focus of the study.

Method of Field Study. Interviews were conducted with 180 urban, suburban, and rural homemakers in Franklin County, Ohio, living in randomly selected census tracts with median income \pm \$1,000 of that for the county. Most of the women were full-time homemakers, although the sample was stratified to include the population proportion of 54 employed women. All of the families had at least one child under 18 years of age.

Questions included in the interview were related to a conceptual framework developed by the authors, utilizing a systems approach. The field study was directed toward structural-functional aspects of home management.

Two situations, market and non-market, were used throughout the interview and different tasks were involved within the two situations. Each component or attribute of components was examined in relation to each situation.

Findings. Plan, including standard and sequence by definition, was examined for a market and non-market situation. Components of standard were proposed as quantity and quality. Quantity was significantly correlated for the market and non-market situation. Other correlations existed which may indicate the difficulty of measuring quality and quantity or that the two are strongly intermeshed in a standard. Sequence was examined as coordination of tasks. Coordination of tasks was far more prevalent in the market than in the non-market situation.

Quality and quantity components were of equal importance in repeat-use plans in the non-market situation, whereas in the market situation quantity was more frequently reported than quality. For non-market single-use plans, again the quality-quantity components were similar, but for the market situation, quality far outweighed the quantity component. Sequence in the market situation was of equivalent importance in both repeat-use and single-use plans. In the non-market situation, it was more prevalent in single-use plans.

For both standard and sequence, four attributes—clarity, flexibility, reality, and complexity—were

measured for market and non-market situations. No significant correlations existed for the same attributes for either standard *or* sequence; however, there were six correlations for clarity-clarity, reality-reality, and complexity-complexity for standard *and* sequence. No pattern for task or situation appeared in the correlations.

Checking, adjusting, and facilitating were considered in control. All three components occurred more in market than in non-market situations. Differences in the two situations lend support to the inclusion of more than one measure of any component or attribute.

Consistent negative correlations existed between adjusting and reality of standard and sequence for market and non-market situations. Adjusting and flexibility of standard and sequence were correlated but not in a consistent direction. Facilitating and clarity of standard were significantly correlated for non-market situations.

A least squares method of analysis of variance was utilized for selected demographic variables in relation to managerial components. Only non-market situations were found to have significant F values.

For quality-standard, an increase in the education of wife accompanied an increase in the quality items given. For quantity, as years of marriage increased, quantity indicants decreased.

Coordination of tasks varied with social position. As social position increased, coordination decreased.

Attributes. Clarity of sequence varied with two factors—as number of children under 6 years of age increased, clarity of sequence decreased, and as persons per room increased, clarity of sequence increased.

Flexibility-standard varied with location, occupation of wife, and persons per room. Descending order of flexibility in relation to location was urban, suburban, and rural homemakers. In descending order of flexibility were clerical and sales workers, semi-skilled, and non-employed homemakers. Flexibility increased with persons per room.

Reality-standard decreased as the number of children under 6 years of age increased. Reality-standard and sequence increased as the health of the homemaker increased.

For complexity-standard, health of wife was negatively related. For only one component of control, adjusting, was significant variance accounted for—health of homemaker was negatively associated with adjusting.

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APPENDIX A—DEFINITIONS OF CONCEPTS

CONCEPT	DEFINITION	OPERATIONAL DESCRIPTION	INTERVIEW QUESTION	CLASSIFICATION	RATING
PLANNING	Series of decisions concerning standards and/or sequence of action				
Standard	Measure of quality and/or quantity	Definition of quality and/or quantity in statement			
Quality	Property or image of that which is desired	General expression or illustration of a property or image	Market At the time you moved here, what were you looking for in a place to live?	Quality— House/grounds, people, or location (other than distance or area).	Actual number mentioned
			Non-market How would you like the living room in this picture to appear if it were yours?	Quality— General expression (positive or negative): neat, livable, convenient, order, balance; illustration: too much on table, too crowded, ironing board out of place.	Actual number mentioned
Quantity	Determinate or estimated amount	Expression of an amount	Market Same as above	Quantity— Space, distance, cost or price range.	Actual number mentioned
			Non-market Same as above	Quantity— Specific tasks homemaker would perform to change the appearance of the room.	Actual number mentioned
Attributes of Standards					
Clarity	Specification of quality and/or quantity	Defined indicators of standard	Market The last time you shopped for shoes, what kind of shoes did you buy or were you looking for?	Clarity— Specific: color, heel height, trimmings, type of material, throat; vague: heels, plain, large size; situation specific: wedding, funeral, dance.	Actual number of indicators mentioned

CONCEPT	DEFINITION	OPERATIONAL DESCRIPTION	INTERVIEW QUESTION	CLASSIFICATION	RATING
Attributes of Standards Clarity (continued)			Non-market On (day of week) when you cleaned the living room, what did you hope to accomplish?	Clarity— Specific: clean floors, walls, dust or wax furniture, sweep or vacuum floor; vague: just clean it, get rid of dust and dirt, make it presentable for company; specific products and/or special techniques: ammonia for windows, upholstery cleaner for chairs, brass polish on metal.	Actual number of indicators mentioned
Flexibility	Range of acceptable quality and/or quantity for a given situation	Indication of willingness to change quality and/or quantity	Market What would you have done if you had been shopping for hamburger and only ground round were available at your store?	Flexible— Would buy ground round, would buy ground round with cost or time or amount considered.	3
				Somewhat Flexible— Would change plans (menu).	2
				Inflexible— Would not buy it, would go to another store, would send someone to another store, always buy ground round.	1
Reality	Feasible quality and/or quantity	Accomplishment of task consistent with expectation	Non-market Which of the pictures of beds are acceptable to you?	Flexibility— Number of acceptable pictures of beds (7 possible).	Actual number acceptable
Reality	Feasible quality and/or quantity	Accomplishment of task consistent with expectation	Market The last time you went to the store, did you spend more, less, or about the same amount of money for groceries that you had thought you would? Did you get in terms of quality more, less, or about the same as you had expected to get? Did you get in terms of amount more, less or about the same as you had expected to get?	Realistic— Quality, amount, and money about the same as expected.	3
				Somewhat Realistic— Two (of quality, amount, and money) about the same as expected.	2
				Unrealistic— One or none (of quality, amount, and/or money) about the same as expected.	1

CONCEPT	DEFINITION	OPERATIONAL DESCRIPTION	INTERVIEW QUESTION	CLASSIFICATION	RATING
Attributes of Standards Reality (continued)			Non-market Was the quality of cleaning better, not as good or about the same as you had expected it to be? Did you accomplish more, less, or about the same amount of cleaning as you had thought you would?	Realistic— Quality and quantity as expected.	3
				Somewhat Realistic— Quality or quantity as expected.	2
				Unrealistic— Neither quality or quantity as expected.	1
Complexity	Interrelationship of persons and standards	The number of persons and tasks involved in a standard	Market Who did the grocery shopping the last time you spent \$5.00 or more? Wife, husband, both, other. Who decided the amount of money to spend on them the last time? Wife, husband, both, other.	Complex— More than one person decided amount of money and/or did the shopping.	2
				Simple— One person decided money and did the shopping.	1
			Non-market Who cleaned the living room last time? Who decided how the living room should look the last time it was cleaned? Wife, husband, both, children.	Complex— More than one person did the cleaning and/or decided how it should look.	2
				Simple— Person who did cleaning decided how it should look.	1
Sequence	Ordering parts of a task or among tasks				
Independent	No relationship other than sequential	Performing tasks separately			

CONCEPT	DEFINITION	OPERATIONAL DESCRIPTION	INTERVIEW QUESTION	CLASSIFICATION	RATING
Sequence (continued) Coordinated	Performing tasks together, either overlapping or dovetailing	Performing tasks together	Market Hypothetical shopping situation: Where would you go to do the shopping? How would you go about it?	Coordinated— Two or more items purchased or mentioned together.	Actual number of times mentioned
			Non-market Hypothetical family situation: Will you suggest how Mrs. Smith might take care of the situation?	Coordinated— Tasks done together.	Actual number of tasks
Overlapping	Simultaneous attention to two tasks				
Dovetailing	Intermittent attention to tasks until completed				
Attributes of Sequence Clarity	Specification of order within or among tasks	Degree or extent of specification	Market Will you describe how you shopped for the groceries inside the store the last time you shopped?	High Clarity— Order by items to be purchased.	3
				Moderate Clarity— Order by foodstuffs or categories.	2
				Low Clarity— Up and down aisles or according to layout of stores.	1
			Non-market Could you give me the order in which you cleaned the living room?	Clarity— Operations in cleaning living room.	Actual number mentioned

CONCEPT	DEFINITION	OPERATIONAL DESCRIPTION	INTERVIEW QUESTION	CLASSIFICATION	RATING
Attributes of Sequence Flexibility	(continued) Range of acceptable order of tasks	Extent of acceptance of alternatives	Market When do you do your regular grocery shopping? If you couldn't go at this time, what would you do?	Flexible —Would go at another time (but not as part of regularly scheduled time); would go at two different times.	3
				Somewhat Flexible —Would do at alternate time given for regular shopping; would buy necessities and make do; would go the next day; combination of inflexible and flexible.	2
				Inflexible —Would send someone else to shop; would wait until next regularly scheduled time; wouldn't happen; would go as soon as possible.	1
			Non-market If you had decided to clean your living room at a certain time and you could not clean it then for some unexpected reason, what would you do?	Flexible —Would clean at another time (but not as a part of regularly scheduled time); clean later.	3
				Somewhat Flexible —Would do it the next day; would do it at an alternate time for cleaning; would do a quick touch-up and let go; combination of flexible and inflexible; do later with modified conditions.	2
				Inflexible —Would have someone else clean; would wait until next regularly scheduled time; wouldn't happen; clean that afternoon or stay up at night; as soon as possible.	1
Reality	Feasible order within or among tasks	Completing of task(s) within expected order and time	Market The last time you went to the store, did you include errands other than grocery shopping?	Realistic —Shopping and other tasks done in order and time expected.	3
				Somewhat Realistic —Shopping and other tasks completed in order or time expected.	2

CONCEPT	DEFINITION	OPERATIONAL DESCRIPTION	INTERVIEW QUESTION	CLASSIFICATION	RATING
Attributes of Sequence Reality (continued)			Were you able to complete the grocery shopping and other errands in the order you had thought you would? Were you able to complete your shopping in the time you had thought you would?	Unrealistic— shopping and other errands done in neither time nor order expected.	1
			Non-market Was this the order you had thought you would use (cleaning the living room)?	Realistic— Order homemaker thought she would use.	3
				Somewhat Realistic— Somewhat the order homemaker thought she would use.	2
Complexity	Interrelationship of persons and tasks	Number of persons and tasks involved in a sequence(s)	Market Did you shop alone for the shoes? Was the shoe shopping done in connection with other shopping or errands? If yes, what other errands?	Unrealistic— Did not use order homemaker thought she would use.	1
				Complex— Shopped with someone, but only for shoes or shopped with someone and did more than shoe shopping.	3
				Somewhat Complex— Shopped alone and for more than shoes.	2
			Non-market Who cleaned the living room the last time? Was cleaning the living room combined with any other job?	Simple— Shopped alone and only for shoes.	1
				Complex— More than one person cleaned, but only did the living room cleaning or more than one person cleaned and did more than one task.	3
				Somewhat Complex— One person cleaned room and did more than one task.	2
				Simple— One person cleaned room and that was only task.	1

CONCEPT	DEFINITION	OPERATIONAL DESCRIPTION	INTERVIEW QUESTION	CLASSIFICATION	RATING
Frequency of Use of Plans					
Single-use Plan	Plan used only once or as part of development of a repeat-use plan	Single-use standard and sequence	Market Do you expect to spend any given amount for shoes? Explain. Do you usually buy the same brand of shoes? Explain. Do you usually go to the same store for shoes? Explain.	Single-use Standard— Does not spend given amount for shoes; does not buy same brand of shoes.	0
Repeat-use Plan	Plan used more than once	Repeat-use standard and sequence		Single-use Sequence— Does not go to the same store(s) for shoes.	0
				Repeat-use Standard— Homemaker spends specified amount for shoes; buys same brand(s) of shoes.	1
				Repeat-use Sequence— Goes to same store(s) for shoes.	1
			Non-market Do you expect to spend any given amount of time on evening meal preparation? Explain.	Single-use Standard— Does not spend given amount of time for meal; does not serve meal patterns.	0
				Single-use Sequence— Does not have meals which she serves one time each week.	0
				Repeat-use Standard— Spends given amount of time for meal; serves meal patterns.	1
			Do you have any particular meal patterns which you generally serve? If so, what are they? Do you generally serve the same meal at any one time each week? If so, when is it?	Repeat-use Sequence— Has meals which are served at one time each week.	1
CONTROLLING					
	Regulation of planned behavior				
Regulation	Checking, facilitating, or adjusting				

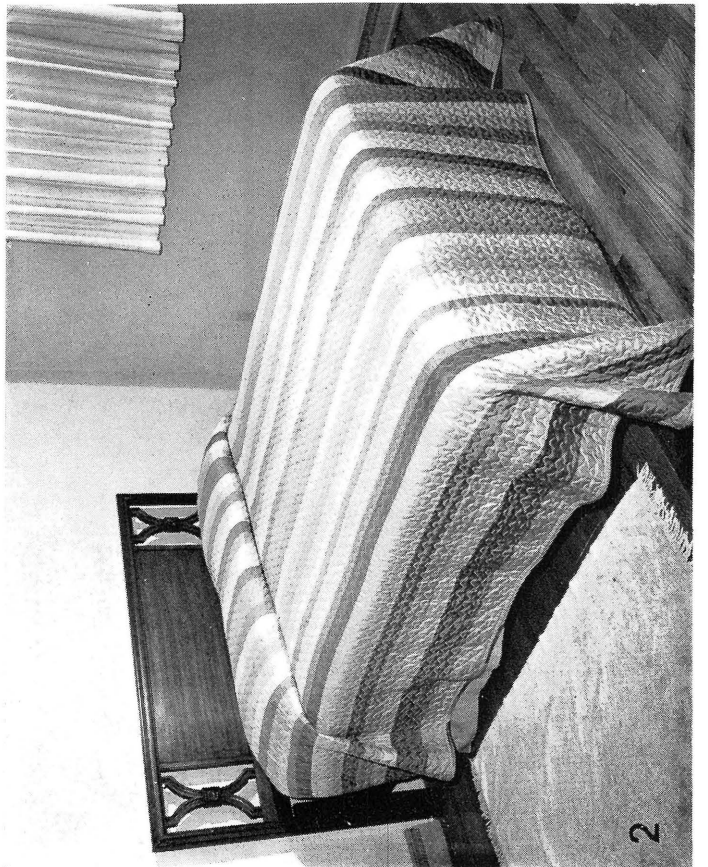
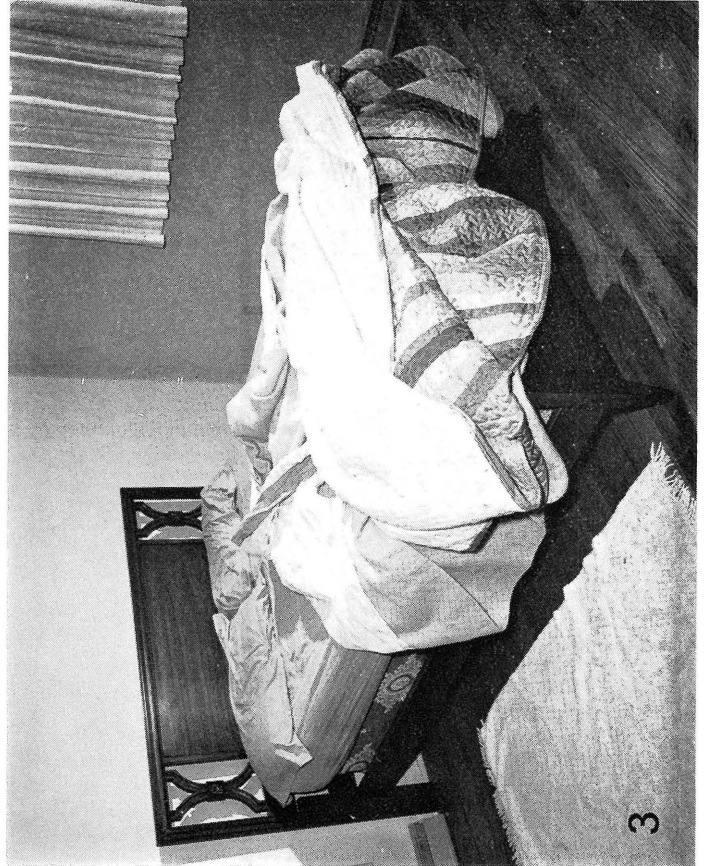
CONCEPT	DEFINITION	OPERATIONAL DESCRIPTION	INTERVIEW QUESTION	CLASSIFICATION	RATING
Checking	Examination of actions	Evidence of checking of standard and sequence of action	Market How were you sure you had the kinds and quality of frozen and canned foods you wanted? While you were shopping, how did you know you had the right amount of a certain product? While you were shopping the last time, did you have a way to avoid backtracking? If so, how?	Checking Standard—Quality— Bought by brand name; checked label for grade.	
				Quantity— Checked. size of package, number of servings, knew menu, meals to be served.	
				Checking Sequence— Had way of avoiding backtracking.	
				Much Checking— Standard and sequence checked.	3
				Moderate Checking— Standard or sequence checked.	2
				Little Checking— Standard partially checked and no check of sequence.	1
			Non-market When you cleaned the living room, did you find anything that took more or less attention than you expected to give it? If yes, how did you decide about it? Did you give things a certain amount of attention and effort whether they needed it or not? If no, how did you decide about it?	Checking Standard—Quality— Decided by appearance.	
				Quantity— Decided by time available.	
				Checking Sequence— Worked a certain time.	
				Much Checking— Standard and sequence checked.	3
				Moderate Checking— Standard or sequence checked.	2
				Little Checking— Quantity or quality checked and sequence not checked.	1
Adjusting	Change in planned sequence or standard	Standard— Change in quality or quantity; Sequence— Change in order of person or tasks	Market Standard— Did you buy items at the grocery store you hadn't thought you would? Did you see anything sale priced that you bought?	Standard Change— Bought different items than she had thought she would.	
				Sequence Change— Did not shop at time originally hoped to, followed different pattern than expected.	
				New Plan— Both standard and sequence changed.	3
				Adjusting— Standard or total sequence changed.	2
			Sequence— Did you shop at the time you originally hoped to?		

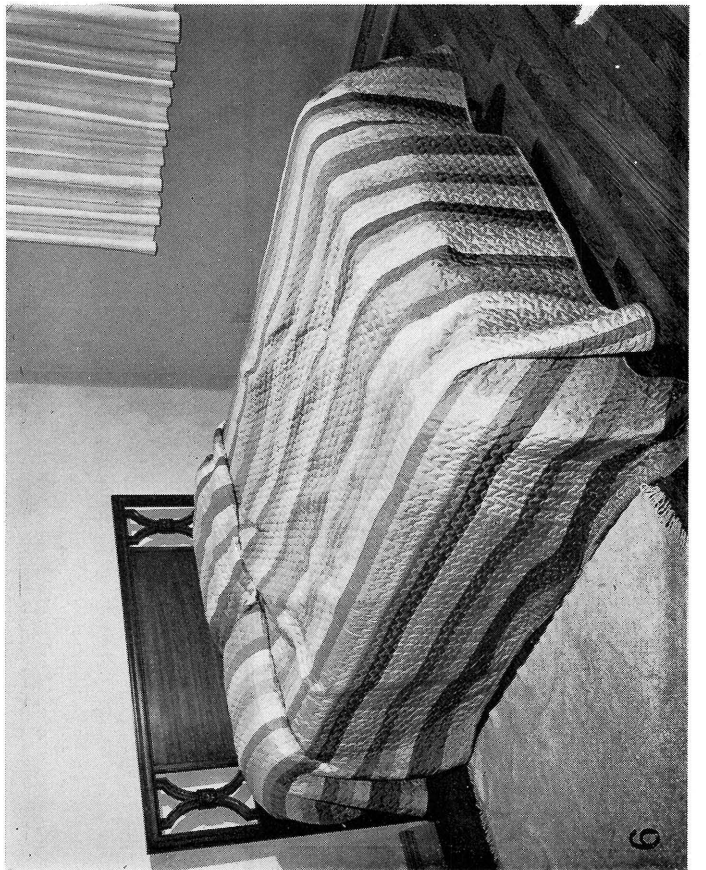
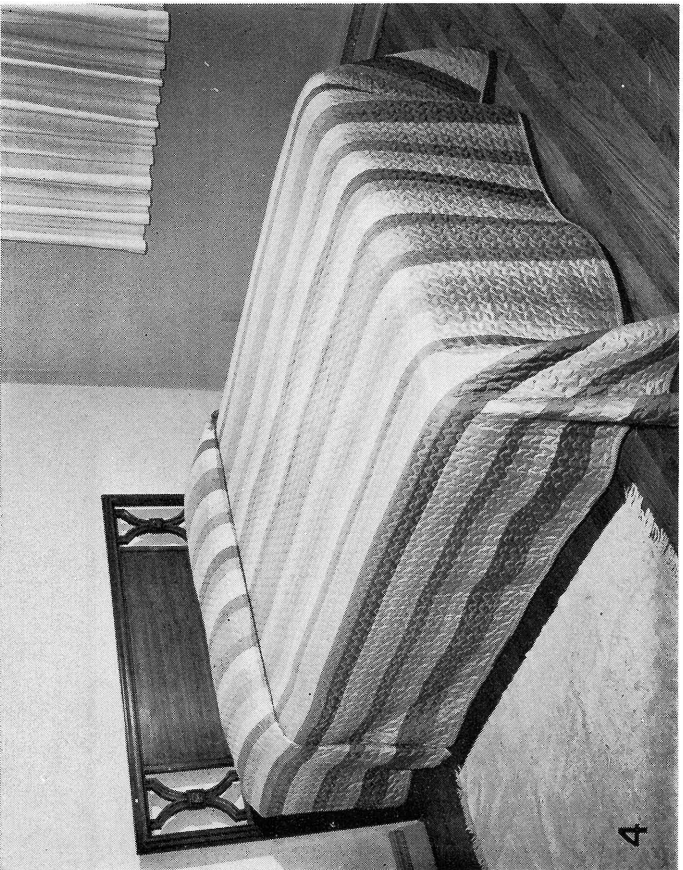
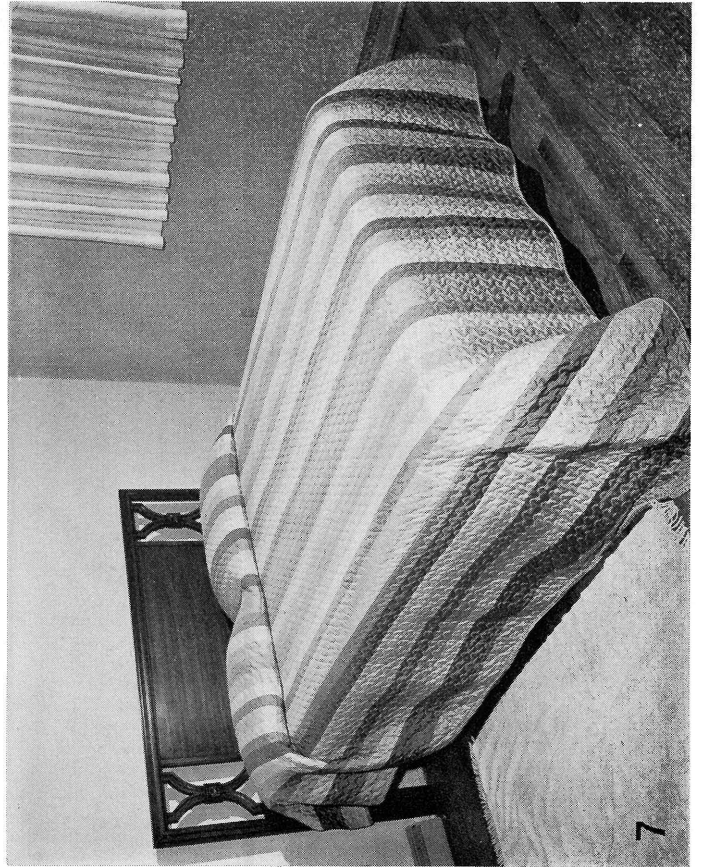
CONCEPT	DEFINITION	OPERATIONAL DESCRIPTION	INTERVIEW QUESTION	CLASSIFICATION	RATING
Adjusting (continued)			Did you follow any different pattern in your shopping last time than you expected to?	Little Adjusting— Standard not changed, sequence partially changed.	1
				No Adjusting— Neither standard nor sequence changed.	0
			Non-market Standard— Was the quality of cleaning better, not as good, or about the same as you had expected it to be? Did you accomplish more, less or about the same amount of cleaning as you had thought you would?	Standard Quality Change— Better than expected or not as good as expected.	
				Quantity Change— Accomplished more than expected; accomplished less than expected.	
				Sequence Change— Had to change time for cleaning living room.	
			Sequence— Did you have to change the time for cleaning the living room?	New Plan— Both standard and sequence changed.	3
				Adjusting— Total standard or sequence changed.	2
				Little Adjusting— Standard partially changed and sequence not changed.	1
Facilitating	Assistance to the progress or flow of actions	Indication of assistance to progress or flow of action through personal or situational factors: personal qualities of the manager; situational aspects of the home-family situation or physical situation	Market Is there anything about your family situation which makes your grocery shopping easier or harder than it otherwise might be? Is there anything about you or how you go about the grocery shopping that makes it easier or harder? Anything about the places you shop that makes the shopping easier or harder than it might otherwise be?	No Adjusting— Neither standard nor sequence changed.	0
				Personal— Physical well-being, motivation, knowledge, skills, experience, shopping habits.	
				Family— Composition or age of members, preferences, help, technical resources, obligations.	
				Physical— Location and types of stores, store policies, layout, task characteristics.	
				Much Facilitating— Personal, family, and physical factors contribute.	3
				Moderate Facilitating— Two of the three factors contribute.	2
				Little Facilitating— One of the three factors contributes.	1

CONCEPT	DEFINITION	OPERATIONAL DESCRIPTION	INTERVIEW QUESTION	CLASSIFICATION	RATING
Facilitating (continued)			<p>Non-market Is there anything about your family situation which makes cleaning your living room harder or easier than it otherwise might be? Is there anything about you or how you go about the cleaning that makes it easier or harder? Anything about the living room or house that makes it easier or harder to clean than it might otherwise be?</p>	<p>Personal— Age, health, motivation, skills, knowledge, work habits, standards.</p> <p>Family— Composition or age of members, obligations and activities, family standards, help, living habits.</p> <p>Physical— Size of room, equipment, living space available, type of furnishings.</p> <p>Much Facilitating— Personal, family, and physical factors contribute.</p> <p>Moderate Facilitating— Two of the three factors contribute.</p> <p>Little Facilitating— One of the three factors contributes.</p>	<p>3</p> <p>2</p> <p>1</p>

APPENDIX B—PHOTOGRAPHS USED IN INTERVIEWS

Bedmaking Photographs





Living Room Photograph



APPENDIX C. HYPOTHETICAL SITUATIONS USED IN INTERVIEWS

MARKET (Family Shopping)

As Mrs. Brown is preparing dinner, she thinks about the shopping which must be done the next day, Saturday. It is her oldest daughter Sally's 17th birthday and Sally wants a raincoat. They'll need some snacks for the party Sally is having that night.

Mrs. Brown checks with others in the family and finds that Mr. Brown needs a nozzle for the garden hose and his grey suit from the cleaners. Sally needs a marker for making signs for school.

Mrs. Brown herself needs some mending tape and would like to look at some Spring suits she saw advertised on sale.

Where would you go to do the shopping?

How would you go about it?

Note: If homemaker leaves out any of the following, ask: How about_____?

Raincoat	Snacks for party
Suit at cleaners	Garden hose nozzle
Marker for signs	Spring suit looking
Mending tape	

NON-MARKET (Busy Family)

Here is a description of a situation in which a homemaker might find herself.

Will you suggest how Mrs. Smith might take care of the situation?

At 3:30, Mrs. Smith takes medicine to Charles, her 10-year-old son who is home from school with a cold. He is lying on the living room couch watching television and his youngest brother David, a toddler, is playing with blocks and cars in the same room. As Mrs. Smith enters the room, David brings a book to her and asks her to read to him; Charles reminds her that he needs help with his arithmetic if he is going back to school the next day. It is time for the two girls, Alice, age 8, and Betty, age 6½, to come home from school.

As Mrs. Smith looks at the room, she thinks to herself that she needs to have supper ready when her husband comes home and that she had planned to bake a pie for tonight. Also, she should straighten up the living room before Mr. Smith comes home at 5:00 because he doesn't like to find it muddled up.

Just then, the girls come in and Alice asks her if she has cleaned the ice cream off her Brownie uniform because she has to wear it to the meeting at 4:00. She hasn't.

Note: Include words like: then, while, at same time, first, next, etc.

If the homemaker does not mention each of the situations listed below, ask: What about (name situations she has not mentioned)?

Medicine to child	Helping with arithmetic
Brownie uniform	Straightening living room
Reading to toddler	Dinner-dessert

APPENDIX D

DIRECTIONS FOR SAMPLING PROCEDURES

In the Northwest corner of the census tract area, locate the first street running north and south. Interview the first eligible homemaker at home on the south side of each intersecting street, omitting in all cases the corner house or building.

When one family has been interviewed, move to the next block south until all intersecting streets along the street have been covered.

Go to the south boundary of the next north-south street to the east side of the original street and repeat. Interview on the south side of each intersecting street east of the second street. Repeat for all north-south streets in the tract.

If the quota is not filled, reverse with the north side of each intersecting street to the west.

APPENDIX E

DEFINITIONS OF TERMS

FAMILY RELATED

Family—husband-wife household plus all persons living in the household who are dependent or related.

Child—a dependent child under 18 years of age.

Number of Children—includes own or any other dependent children living in the household, May-June, 1966. Does not represent total number of children homemaker may have had.

Age of Children—ages rounded to nearest whole number; if 6 months and above, rounded to next year; if under 6 months, not raised.

Number of Children Under 6—total number of children living in the household, age 1 or less to age 5.

Number of Children 6 and Over—total number of children, ages 6 to 18, living in the household.

Years of Marriage—number of years of marriage; if more than one marriage, a total is given.

Health of Family Members—1) good, 2) fairly good, 3) fair, 4) poor.

Occupation Scale—"The precise occupational role the head of the household performs in the economy" according to Hollingshead's occupational scale: (1) higher executives, proprietors of large concerns and major professionals; (2) business managers, proprietors of medium sized businesses, and lesser professionals; (3) administrative personnel, small independent businesses, and minor professionals; (4) clerical and sales workers, technicians, and owners of little businesses; (5) skilled and manual employees; (6) machine operators and semi-skilled employees; and (7) unskilled employees. Also used for employed wives.

Education Scale—last grade of schooling: (1) graduate professional training, (2) standard college or university graduation, (3) partial college training, (4) high school graduate, (5) partial high school, (6) junior high school, (7) less than 7 years of schooling.

Hollingshead's Index of Social Position Score—to calculate score for an individual, the scale value for **occupation** of husband is multiplied by the factor weight of 7 and the scale value for **education** of husband is multiplied by the factor weight of 4 and total equals the ISP score. Scores can range from 11 to 77. Scores are grouped into Social Class as follows:

Social Class	Range of Computed Scores
I	11-17
II	18-27
III	28-43
IV	44-60
V	61-77

WIFE RELATED

Employment of Wife, 1966—wife who has been working for pay one-half time (20 hours) or more per week during the past 2 months, with no more than 1 week away from work, is considered **employed**. All others are **not employed**.

Health of Wife—1) good, 2) fairly good, 3) fair, 4) poor.

Age of Wife—number of years.

HOUSE RELATED

Family Dwellings—single family dwelling units or facilities close to a single family dwelling such as a duplex or twin-single were included. Apartment buildings which did not have separate entrances and those which shared the outside walkways were excluded. Multi-family dwellings converted from single-family dwellings were not included unless all facilities were separate.

Tenure—length of time in house in years, less than 1 year is counted as 1 year and more than 10 years are counted as 10.

Rooms in House—excludes bath, hall, and dining area.

Persons per Room—the number of persons for each housing unit divided by the number of rooms in the unit (17).

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The State Is the Campus for Agricultural Research and Development



Ohio's major soil types and climatic conditions are represented at the Research Center's 11 locations. Thus, Center scientists can make field tests under conditions similar to those encountered by Ohio farmers.

Research is conducted by 13 departments on more than 6200 acres at Center headquarters in Wooster, nine branches, and The Ohio State University.

Center Headquarters, Wooster, Wayne County: 1953 acres

Eastern Ohio Resource Development Center, Caldwell, Noble County: 2053 acres

Jackson Branch, Jackson, Jackson County: 344 acres

Mahoning County Farm, Canfield: 275 acres

Muck Crops Branch, Willard, Huron County: 15 acres

North Central Branch, Vickery, Erie County: 335 acres

Northwestern Branch, Hoytville, Wood County: 247 acres

Southeastern Branch, Carpenter, Meigs County: 330 acres

Southern Branch, Ripley, Brown County: 275 acres

Western Branch, South Charleston, Clark County: 428 acres